

PCT10

RAW SEQUENCE LISTING DATE: 04/11/2002 PATENT APPLICATION: US/10/089,019 TIME: 16:07:33

Input Set : A:\USSEQLIST.TXT

Output Set: N:\CRF3\04112002\J089019.raw

ENTERED

```
4 <110> APPLICANT: DEWOLF, WALTER E. JR
              KALLENDER, HOWARD
      6
              LONSDALE, JOHN T.
      8 <120> TITLE OF INVENTION: METHODS FOR MAKING AND USING FATTY ACID
              SYNTHESIS PATHWAY REAGENTS
     12 <130> FILE REFERENCE: GM50068
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/089,019
     15 <141> CURRENT FILING DATE: 2002-03-25
     17 <150> PRIOR APPLICATION NUMBER: PCT/US00/29451
     18 <151> PRIOR FILING DATE: 2000-10-26
     20 <150> PRIOR APPLICATION NUMBER: 60/161,775
     21 <151> PRIOR FILING DATE: 1999-10-27
    23 <160> NUMBER OF SEQ ID NOS: 37
    25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
    27 <210> SEQ ID NO: 1
    28 <211> LENGTH: 999
    29 <212> TYPE: DNA
    30 <213> ORGANISM: Staphylococcus aureus
    32 <400> SEQUENCE: 1
    33 atgggccatc atcatcatca tcatcatcat catcacagca gcggccatat cgaaggtcgt 60
    34 catatgctcg agatgagtaa aacagcaatt atttttccgg gacaaggtgc ccaaaaagtt 120
    35 ggtatggcac aagatttgtt taataacaat gatcaagcaa ctgaaatttt aacttcagca 180
    36 gcaaagacgt tagactttga tattttagag acaatgttta ctgatgaaga aggtaaattg 240
    37 ggtgaaactg aaaacacgca accagcttta ttgacgcata gttcggcatt attagcagcg 300
    38 ctaaaaattt tgaatcctga ttttactatg gggcatagtt taggtgaata ttcaagttta 360
    39 gttgcagctg acgtattatc atttgaagat gcagttaaaa ttgttagaaa acgtggtcaa 420
    40 ttaatggcgc aagcatttcc tactggtgta ggaagcatgg ctgcagtatt gggattagat 480
    41 tttqataaaq tcqatqaaat ttqtaaqtca ttatcatctq atqacaaaat aattqaacca 540
    42 gcaaacatta attgcccagg tcaaattgtt gtttcaggtc acaaagcttt aattgatgag 600
    43 ctagtagaaa aaggtaaatc attaggtgca aaacgtgtca tgcctttagc agtatctgga 660
    44 ccattccatt catcgctaat gaaagtgatt gaagaagatt tttcaagtta cattaatcaa 720
    45 tttgaatggc gtgatgctaa gtttcctgta gttcaaaatg taaatgcgca aggtgaaact 780
    46 gacaaagaag taattaaatc taatatggtc aagcaattat attcaccagt acaattcatt 840
    47 aactcaacag aatggctaat agaccaaggt gttgatcatt ttattgaaat tggtcctgga 900
    48 aaagttttat ctggcttaat taaaaaaata aatagagatg ttaagttaac atcaattcaa 960
    49 actttagaag atgtgaaagg atggaatgaa aatgactaa
    51 <210> SEQ ID NO: 2
    52 <211> LENGTH: 332
    53 <212> TYPE: PRT
    54 <213> ORGANISM: Staphylococcus aureus
    56 <400> SEOUENCE: 2
    57 Met Gly His His His His His His His His His Ser Ser Gly His
    58 1
                        5
                                                                15
                                            10
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Input Set : A:\USSEQLIST.TXT

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59 Ile Glu Gly Arg His Met Leu Glu Met Ser Lys Thr Ala Ile Ile Phe
61 Pro Gly Gln Gly Ala Gln Lys Val Gly Met Ala Gln Asp Leu Phe Asn
                                40
63 Asn Asn Asp Gln Ala Thr Glu Ile Leu Thr Ser Ala Ala Lys Thr Leu
                           55
65 Asp Phe Asp Ile Leu Glu Thr Met Phe Thr Asp Glu Glu Gly Lys Leu
                       70
                                            75
67 Gly Glu Thr Glu Asn Thr Gln Pro Ala Leu Leu Thr His Ser Ser Ala
                   85
69 Leu Leu Ala Ala Leu Lys Ile Leu Asn Pro Asp Phe Thr Met Gly His
71 Ser Leu Gly Glu Tyr Ser Ser Leu Val Ala Ala Asp Val Leu Ser Phe
                                120
73 Glu Asp Ala Val Lys Ile Val Arg Lys Arg Gly Gln Leu Met Ala Gln
75 Ala Phe Pro Thr Gly Val Gly Ser Met Ala Ala Val Leu Gly Leu Asp
                                           155
77 Phe Asp Lys Val Asp Glu Ile Cys Lys Ser Leu Ser Ser Asp Asp Lys
                   165
                                       170
79 Ile Ile Glu Pro Ala Asn Ile Asn Cys Pro Gly Gln Ile Val Val Ser
               180
                                   185
81 Gly His Lys Ala Leu Ile Asp Glu Leu Val Glu Lys Gly Lys Ser Leu
           195
                               200
83 Gly Ala Lys Arg Val Met Pro Leu Ala Val Ser Gly Pro Phe His Ser
                           215
                                                220
85 Ser Leu Met Lys Val Ile Glu Glu Asp Phe Ser Ser Tyr Ile Asn Gln
                       230
                                           235
87 Phe Glu Trp Arg Asp Ala Lys Phe Pro Val Val Gln Asn Val Asn Ala
                                       250
89 Gln Gly Glu Thr Asp Lys Glu Val Ile Lys Ser Asn Met Val Lys Gln
               260
                                   265
91 Leu Tyr Ser Pro Val Gln Phe Ile Asn Ser Thr Glu Trp Leu Ile Asp
                               280
93 Gln Gly Val Asp His Phe Ile Glu Ile Gly Pro Gly Lys Val Leu Ser
                           295
                                               300
95 Gly Leu Ile Lys Lys Ile Asn Arg Asp Val Lys Leu Thr Ser Ile Gln
                      310
97 Thr Leu Glu Asp Val Lys Gly Trp Asn Glu Asn Asp
                   325
101 <210> SEQ ID NO: 3
102 <211> LENGTH: 312
103 <212> TYPE: PRT
104 <213> ORGANISM: Staphylococcus aureus
106 <400> SEQUENCE: 3
107 His Met Leu Glu Met Ser Lys Thr Ala Ile Ile Phe Pro Gly Gln Gly
                                        10
109 Ala Gln Lys Val Gly Met Ala Gln Asp Leu Phe Asn Asn Asn Asp Gln
110
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Input Set : A:\USSEQLIST.TXT

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111 Ala Thr Glu Ile Leu Thr Ser Ala Ala Lys Thr Leu Asp Phe Asp Ile
112
113 Leu Glu Thr Met Phe Thr Asp Glu Glu Gly Lys Leu Gly Glu Thr Glu
                             55
115 Asn Thr Gln Pro Ala Leu Leu Thr His Ser Ser Ala Leu Leu Ala Ala
116 65
                         70
117 Leu Lys Ile Leu Asn Pro Asp Phe Thr Met Gly His Ser Leu Gly Glu
118
                    85
                                         90
119 Tyr Ser Ser Leu Val Ala Ala Asp Val Leu Ser Phe Glu Asp Ala Val
120
                                     105
                100
121 Lys Ile Val Arg Lys Arg Gly Gln Leu Met Ala Gln Ala Phe Pro Thr
            115
                                 120
123 Gly Val Gly Ser Met Ala Ala Val Leu Gly Leu Asp Phe Asp Lys Val
                             135
                                                 140
125 Asp Glu Ile Cys Lys Ser Leu Ser Ser Asp Asp Lys Ile Ile Glu Pro
126 145
                        150
                                             155
127 Ala Asn Ile Asn Cys Pro Gly Gln Ile Val Val Ser Gly His Lys Ala
128
                    165
                                         170
129 Leu Ile Asp Glu Leu Val Glu Lys Gly Lys Ser Leu Gly Ala Lys Arg
                180
                                     185
131 Val Met Pro Leu Ala Val Ser Gly Pro Phe His Ser Ser Leu Met Lys
            195
                                 200
                                                     205
133 Val Ile Glu Glu Asp Phe Ser Ser Tyr Ile Asn Gln Phe Glu Trp Arg
        210
                            215
                                                 220
135 Asp Ala Lys Phe Pro Val Val Gln Asn Val Asn Ala Gln Gly Glu Thr
                        230
137 Asp Lys Glu Val Ile Lys Ser Asn Met Val Lys Gln Leu Tyr Ser Pro
                    245
                                         250
139 Val Gln Phe Ile Asn Ser Thr Glu Trp Leu Ile Asp Gln Gly Val Asp
                                     265
141 His Phe Ile Glu Ile Gly Pro Gly Lys Val Leu Ser Gly Leu Ile Lys
            275
                                280
                                                     285
143 Lys Ile Asn Arg Asp Val Lys Leu Thr Ser Ile Gln Thr Leu Glu Asp
                            295
145 Val Lys Gly Trp Asn Glu Asn Asp
146 305
                        310
149 <210> SEQ ID NO: 4
150 <211> LENGTH: 1001
151 <212> TYPE: DNA
152 <213> ORGANISM: Staphylococcus aureus
154 <400> SEQUENCE: 4
155 atgggcagca gccatcatca tcatcatcac agcagcggcc tggtgccgcg cggcagccat 60
156 atgaacgtgg gtattaaagg ttttggtgca tatgcaccag aaaagattat tgacaatgcc 120
157 tattttgagc aatttttaga tacatctgat gaatggattt ctaagatgac tggaattaaa 180
158 gaaagacatt gggcagatga cgatcaagat acttcagatt tagcatatga agcaagtgta 240
159 aaagcaatcg ctgacgctgg tattcagcct gaagatatag atatgataat tgttgccaca 300
160 gcaactggag atatgccatt tccaactgtc gcaaatatgt tgcaagaacg tttagggacg 360
161 ggcaaagttg cctctatgga tcaacttgca gcatgttctg gatttatgta ttcaatgatt 420
162 acagctaaac aatatgttca atctggagat tatcataata ttttagttgt cggtgcagat 480
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Input Set : A:\USSEQLIST.TXT

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163 aaattatcta aaataacaga tttaactgac cgttctactg cagttctatt tggagatggt 540
164 gcaggtgcgg ttatcatcgg tgaagtttca gaaggcagag gtattataag ttatgaaatg 600
165 ggttctgatg gcactggtgg taaacattta tatttagata aagatactgg taaactgaaa 660
166 atgaatggtc gagaagtatt taaatttgct gttagaatta tgggtgatgc atcaacacgt 720
167 gtagttgaaa aagcgaattt aacatcagat gatatagatt tatttattcc tcatcaagct 780
168 aatattagaa ttatggaatc agctagagaa cgcttaggta tttcaaaaga caaaatgagt 840
169 gtttctgtaa ataaatatgg aaatacttca gctgcgtcaa tacctttaag tatcgatcaa 900
170 gaattaaaaa atggtaaact caaagatgat gatacaattg ttcttgtcgg attcggtggc 960
171 ggcctaactt ggggcgcaat gacaataaaa tggggaaaat a
173 <210> SEQ ID NO: 5
174 <211> LENGTH: 333
175 <212> TYPE: PRT
176 <213> ORGANISM: Staphylococcus aureus
178 <400> SEQUENCE: 5
179 Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro
180 1
181 Arg Gly Ser His Met Asn Val Gly Ile Lys Gly Phe Gly Ala Tyr Ala
183 Pro Glu Lys Ile Ile Asp Asn Ala Tyr Phe Glu Gln Phe Leu Asp Thr
185 Ser Asp Glu Trp Ile Ser Lys Met Thr Gly Ile Lys Glu Arg His Trp
187 Ala Asp Asp Asp Gln Asp Thr Ser Asp Leu Ala Tyr Glu Ala Ser Val
                        70
                                             75
189 Lys Ala Ile Ala Asp Ala Gly Ile Gln Pro Glu Asp Ile Asp Met Ile
                    85
191 Ile Val Ala Thr Ala Thr Gly Asp Met Pro Phe Pro Thr Val Ala Asn
                100
193 Met Leu Gln Glu Arg Leu Gly Thr Gly Lys Val Ala Ser Met Asp Gln
                                120
195 Leu Ala Ala Cys Ser Gly Phe Met Tyr Ser Met Ile Thr Ala Lys Gln
                            135
197 Tyr Val Gln Ser Gly Asp Tyr His Asn Ile Leu Val Val Gly Ala Asp
                        150
                                            155
199 Lys Leu Ser Lys Ile Thr Asp Leu Thr Asp Arg Ser Thr Ala Val Leu
                    165
                                        170
201 Phe Gly Asp Gly Ala Gly Ala Val Ile Ile Gly Glu Val Ser Glu Gly
202
                180
                                    185
                                                        190
203 Arg Gly Ile Ile Ser Tyr Glu Met Gly Ser Asp Gly Thr Gly Gly Lys
            195
                                200
205 His Leu Tyr Leu Asp Lys Asp Thr Gly Lys Leu Lys Met Asn Gly Arg
                            215
                                                220
207 Glu Val Phe Lys Phe Ala Val Arg Ile Met Gly Asp Ala Ser Thr Arg
                        230
209 Val Val Glu Lys Ala Asn Leu Thr Ser Asp Asp Ile Asp Leu Phe Ile
210
                                        250
211 Pro His Gln Ala Asn Ile Arg Ile Met Glu Ser Ala Arg Glu Arg Leu
                                    265
213 Gly Ile Ser Lys Asp Lys Met Ser Val Ser Val Asn Lys Tyr Gly Asn
```

Input Set : A:\USSEQLIST.TXT

```
214
            275
                                 280
                                                     285
215 Thr Ser Ala Ala Ser Ile Pro Leu Ser Ile Asp Gln Glu Leu Lys Asn
                            295
217 Gly Lys Leu Lys Asp Asp Thr Ile Val Leu Val Gly Phe Gly Gly
                        310
219 Gly Leu Thr Trp Gly Ala Met Thr Ile Lys Trp Gly Lys
                325
223 <210> SEQ ID NO: 6
224 <211> LENGTH: 315
225 <212> TYPE: PRT
226 <213> ORGANISM: Staphylococcus aureus
228 <400> SEQUENCE: 6
229 Gly Ser His Met Asn Val Gly Ile Lys Gly Phe Gly Ala Tyr Ala Pro
230 1
                                         10
231 Glu Lys Ile Ile Asp Asn Ala Tyr Phe Glu Gln Phe Leu Asp Thr Ser
                                    25
233 Asp Glu Trp Ile Ser Lys Met Thr Gly Ile Lys Glu Arg His Trp Ala
235 Asp Asp Asp Gln Asp Thr Ser Asp Leu Ala Glu Ala Ser Val Lys Ala
                            55
237 Ile Ala Asp Ala Gly Ile Gln Pro Glu Asp Ile Asp Met Ile Ile Val
                                            75
239 Ala Thr Ala Thr Gly Asp Met Pro Phe Pro Thr Val Ala Asn Met Leu
                    85
                                        90
241 Gln Glu Arg Leu Gly Thr Gly Lys Val Ala Ser Met Asp Gln Leu Ala
                100
                                    105
243 Ala Cys Ser Gly Phe Met Tyr Ser Met Ile Thr Ala Lys Gln Tyr Val
            115
                                120
245 Gln Ser Gly Asp Tyr His Asn Ile Leu Val Val Gly Ala Asp Lys Leu
                            135
                                                140
247 Ser Lys Ile Thr Asp Leu Thr Asp Arg Ser Thr Ala Val Leu Phe Gly
                        150
                                            155
249 Asp Gly Ala Gly Ala Val Ile Ile Gly Glu Val Ser Glu Gly Arg Gly
                                        170
251 Ile Ile Ser Tyr Glu Met Gly Ser Asp Gly Thr Gly Gly Lys His Leu
                180
                                    185
253 Tyr Leu Asp Lys Asp Thr Gly Lys Leu Lys Met Asn Gly Arg Glu Val
          195
                                200
255 Phe Lys Phe Ala Val Arg Ile Met Gly Asp Ala Ser Thr Arg Val Val
        210
                            215
                                                220
257 Glu Lys Ala Asn Leu Thr Ser Asp Asp Ile Asp Leu Phe Ile Pro His
258 225
                        230 -
                                            235
259 Gln Ala Asn Ile Arg Ile Met Glu Ser Ala Arg Glu Arg Leu Gly Ile
                    245
261 Ser Lys Asp Lys Met Ser Val Ser Val Asn Lys Tyr Gly Asn Thr Ser
                                    265
263 Ala Ala Ser Ile Pro Leu Ser Ile Asp Gln Glu Leu Lys Asn Gly Lys
                                280
265 Leu Lys Asp Asp Asp Thr Ile Val Leu Val Gly Phe Gly Gly Leu
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/089,019

DATE: 04/11/2002

TIME: 16:07:34

Input Set : A:\USSEQLIST.TXT

Output Set: N:\CRF3\04112002\J089019.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number